

ABSTRACT OF THE DISCLOSURE

A programmable transdermal patch non-invasively delivers pharmaceuticals or other bio-active agents through the skin of a living body. The patch contains one or more agent storage pads and one or more active drivers that apply an electric current to the skin or produce ultrasound to drive the agent into the skin. A digital data processor controls the drivers to match administration of the agents to the needs of the body. The patch may contain a sensor, coupled to the data processor, for monitoring the concentration of a substance in the body in order to vary dosage of a therapeutic agent. A radio contained in the patch enables control by medical personnel from a remote location and/or transmission of sensor data to the remote location. The pads, drivers, sensor, data processor, radio and a battery are all contained within a unitary patch and need no physical connection to external devices.